## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L45	901909	(@pd<"20031222" or @ap<"20031224") and (naphthalene light semiconductor).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
L50	901909	(@pd<"20031222" or @ap<"20031224") and (naphthalene light semiconductor).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:44
L46	893964	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide light semiconductor).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
L51	893964	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide light semiconductor).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:44
L70	356246	electrolumines\$5 and carbazole\$1same (amin\$7 same derivative\$1)	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:46
S221	284819	electrolumines\$5 and carbazole\$1same (amin\$7 same derivative\$1)	US-PGPUB; USPAT	OR	ON	2011/09/09 11:54
S147	273526	electrolumines\$5 and carbazole\$1same (amin\$7 same derivative\$1)	US-PGPUB; USPAT	OR	ON	2011/03/21 13:32
S201	179753	(@pd<"20031222" or @ap<"20031224") and (naphthalene light semiconductor).ti.	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
S202	178947	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide light semiconductor).ti.	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
S117	160544	(@pd<"20031222" or @ap<"20031224") and (naphthalene light semiconductor).ti.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:52
S118	159754	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide light semiconductor).ti.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:52
L29	121454	oxide same improve ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41

L79	118113	oxide same improve ("hole-transporting" or "hole transporting") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:47
S232	115055	oxide same improve ("hole-transporting" or "hole transporting") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09 11:57
L30	113953	oxide same improve ("hole- transporting" or "hole transporting") adj proprety and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41
L78	98220	oxide same improve ("hole-transporting" or "hole transporting") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT	OR	ON	2011/12/31 04:47
S180	97728	oxide same improve ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
S231	95472	oxide same improve ("hole-transporting" or "hole transporting") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT	OR	ON	2011/09/09 11:57

S181	91469	oxide same improve ("hole- transporting" or "hole transporting") adj proprety and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
S61	78637	oxide same improve ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 14:34
S62	74020	oxide same improve ("hole- transporting" or "hole transporting") adj proprety and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 14:34
L42	8190	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
L24	6978	("hole injecting" or "hole transporting" or "hole- injecting" or "hole- transporting" or "hole injection" or "hole- injection") with cathode and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41
L25	6708	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") with layer with cathode and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41
S173	5974	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S174	5746	("hole injecting" or "hole transporting" or "hole- injecting" or "hole- transporting" or "hole injection" or "hole- injection") with layer with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
L26	5665	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41

L58	5544	electrolumines\$5 and oxide \$1 same ("hole- transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:45
S209	5315	electrolumines\$5 and oxide \$1 same ("hole- transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:53
S187	5155	428/690.ccls.	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
S135	4972	electrolumines\$5 and oxide \$1 same ("hole- transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/03/21 13:28
S175	4971	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S75	4432	428/690.ccls.	US-PGPUB; USPAT	OR	ON	2009/07/09 09:27
L2	4289	electroluminescent and oxide same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:39
S53	4240	("hole injecting" or "hole transporting" or "hole- injecting" or "hole- transporting" or "hole injection" or "hole- injection") with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 09:11
S149	4132	electroluminescent and oxide same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:48

L77	4114	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") with cathode and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:47
S54	4056	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") with layer with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 09:11
L20	4029	(carbazole with derivative \$5) same amin\$5	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S230	3951	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") with cathode and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09 11:57
S168	3598	(carbazole with derivative \$5) same amin\$5	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S55	3408	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 09:11
S16	3028	electroluminescent and oxide same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 11:06

S41	2557	(carbazole with derivative \$5) same amin\$5	US-PGPUB; USPAT	OR	ON	2009/06/25 17:14
L71	2440	electroluminescent and oxide same ("hole-transporting" or "hole transporting" or "hole transport") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:46
S224	2350	electroluminescent and oxide same ("hole-transporting" or "hole transporting" or "hole transporting" and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09
L18	1913	electroluminescent and carbazole same ("amine" or "amino")	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S166	1610	electroluminescent and carbazole same ("amine" or "amino")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
L68	1519	electrolumines\$5 and carbazole\$1 same ("hole- injecting" "hole injecting" (hole with inject \$7))	US-PGPUB; USPAT	OR	ON	2011/12/31 04:46
L35	1497	428/690.ccls. and electroluminescent and carbazole	US-PGPUB; USPAT	OR	ON	2011/12/31 04:42
S188	1454	428/690.ccls. and electroluminescent and carbazole	US-PGPUB; USPAT	OR	ON	2011/09/09 11:51
S219	1434	electrolumines\$5 and carbazole\$1 same ("hole- injecting" "hole injecting" (hole with inject \$7))	US-PGPUB; USPAT	OR	ON	2011/09/09 11:54

L76	1402	(carbazole with derivative \$5) same amin\$5 and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:47
S229	1320	(carbazole with derivative \$5) same amin\$5 and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09 11:56
S144	1317	electrolumines\$5 and carbazole\$1 same ("hole- injecting" "hole injecting" (hole with inject \$7))	US-PGPUB; USPAT	OR	ON	2011/03/21 13:31
L19	1274	electroluminescent and carbazole same ("amine" or "amino") same derivative\$5	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
L75	1269	electroluminescent and carbazole same ("amine" or "amino") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:47
S228	1211	electroluminescent and carbazole same ("amine" or "amino") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09 11:56
S76	1186	428/690.ccls. and electroluminescent and carbazole	US-PGPUB; USPAT	OR	ON	2009/07/09 09:27
S167	1124	electroluminescent and carbazole same ("amine" or "amino") same derivative\$5	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
L13	1107	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39

L21	1105	(carbazole with derivative) same amin\$3 and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S37	1104	electroluminescent and carbazole same ("amine" or "amino")	US-PGPUB; USPAT	OR	ON	2009/06/25 16:31
S161	1023	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S145	1014	(vanadium with oxide\$1) same ("hole-injecting" or "hole injecting" or "hole injection" or "hole- injection")	US-PGPUB; USPAT	OR	ON	2011/03/21 13:31
S169	968	(carbazole with derivative) same amin\$3 and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
L69	896	vanadium with oxide\$1 same ("hole-injecting" or "hole injecting" or "hole injection" or "hole- injection") and electrolumines\$5	US-PGPUB; USPAT	OR	ON	2011/12/31 04:46
S220	834	vanadium with oxide\$1 same ("hole-injecting" or "hole injecting" or "hole injection" or "hole- injection") and electrolumines\$5	US-PGPUB; USPAT	OR	ON	2011/09/09 11:54
S197	821	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti.	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
L9	814	electroluminescent and "ruthenium oxide"	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
S107	800	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:28
S157	762	electroluminescent and "ruthenium oxide"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S38	761	electroluminescent and carbazole same ("amine" or "amino") same derivative\$5	US-PGPUB; USPAT	OR	ON	2009/06/25 16:31
S146	736	vanadium with oxide\$1 same ("hole-injecting" or "hole injecting" or "hole injection" or "hole- injection") and electrolumines\$5	US-PGPUB; USPAT	OR	ON	2011/03/21 13:32
S42	628	(carbazole with derivative) same amin\$3 and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/06/25 17:14

L73	612	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:46
L14	575	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:39
S226	560	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09 11:56
S29	546	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection")	US-PGPUB; USPAT	OR	ON	2009/06/25 12:09
S162	525	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
L66	458	electrolumines\$5 and rhenium adj oxide\$1	US-PGPUB; USPAT	OR	ON	2011/12/31 04:46
S25	455	electroluminescent and "ruthenium oxide"	US-PGPUB; USPAT	OR	ON	2009/06/25 12:00
S98	428	("electron injecting") with oxadiazole	US-PGPUB; USPAT	OR	ON	2009/07/09 17:26
S217	417	electrolumines\$5 and rhenium adj oxide\$1	US-PGPUB; USPAT	OR	ON	2011/09/09 11:54
L62	416	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:45
L63	416	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:45

S213	394	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:53
S214	394	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:53
L72	368	electroluminescent and "ruthenium oxide" and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:46
L22	355	(carbazole with derivative) same amin\$3 and electroluminescent and @ay<="2004"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S142	353	electrolumines\$5 and rhenium adj oxide\$1	US-PGPUB; USPAT	OR	ON	2011/03/21 13:30
S139	348	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/03/21 13:29
S225	344	electroluminescent and "ruthenium oxide" and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).cds.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09 11:56
L74	341	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:46

L15	328	electroluminescent and carbazole same ("electron-injecting" or "electroninjecting" or "electroninjection" or "electroninjection")	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S170	328	(carbazole with derivative) same amin\$3 and electroluminescent and @ay<="2004"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S227	317	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/09/09
S43	308	(carbazole with derivative) same amin\$3 and electroluminescent and @ay<="2004"	US-PGPUB; USPAT	OR	ON	2009/06/25 17:15
S30	298	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/06/25 12:10
L48	293	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same oxide	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:44
L53	293	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same oxide	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:44
L8	288	electroluminescent and "rhenium oxide"	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
L6	277	electroluminescent and "vanadium oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
L32	273	fluorene same ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:41
S156	265	electroluminescent and "rhenium oxide"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48

S153	261	electroluminescent and "vanadium oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S163	251	electroluminescent and carbazole same ("electron-injecting" or "electroninjecting" or "electroninjection" or "electroninjection")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S184	250	fluorene same ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:50
S204	224	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same oxide	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
L59	217	electrolumines\$5 and inorganic adj compound\$1 same oxide\$1 same ("holetransporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:45
L34	206	anthracene with ("hole transporting" or "hole- transporting") and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/12/31 04:42
S210	203	electrolumines\$5 and inorganic adj compound\$1 same oxide\$1 same ("holetransporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:53
S186	199	anthracene with ("hole transporting" or "hole- transporting") and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
S128	183	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same oxide	US-PGPUB; USPAT	OR	OFF	2010/02/04 13:55
S136	179	electrolumines\$5 and inorganic adj compound\$1 same oxide\$1 same ("holetransporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/03/21 13:28

L67	178	electrolumines\$5 and ruthenium adj oxide\$1 same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:46
S32	178	electroluminescent and carbazole same ("electron-injecting" or "electroninjecting" or "electroninjection" or "electroninjection")	US-PGPUB; USPAT	OR	ON	2009/06/25 12:53
S218	165	electrolumines\$5 and ruthenium adj oxide\$1 same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:54
L44	162	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
L60	160	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:45
S21	158	electroluminescent and "vanadium oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2009/06/25 11:23
S143	146	electrolumines\$5 and ruthenium adj oxide\$1 same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2011/03/21 13:30
S211	144	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:53
S74	141	anthracene with ("hole transporting" or "hole- transporting") and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 17:37
L61	140	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:45

S72	132	fluorene same ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/08 17:10
L10	129	electroluminescent and "ruthenium oxide" same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
S137	127	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/03/21 13:28
S212	126	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:53
L11	120	electroluminescent and carbazole same "hole- injecting"	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
L33	120	fluorene with ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:42
S158	120	electroluminescent and "ruthenium oxide" same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S159	120	electroluminescent and "ruthenium oxide" same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S185	116	fluorene with ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:50
S24	115	electroluminescent and "rhenium oxide"	US-PGPUB; USPAT	OR	ON	2009/06/25 11:26
L28	110	("charge generation" or "charge-generating") adj layer with cathode and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41

S138	110	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/03/21 13:29
L64	107	electrolumines\$5 and vanadium adj oxide\$1 same transport\$1 with layer\$1	US-PGPUB; USPAT	OR	ON	2011/12/31 04:46
L3	98	electroluminescent and "inorganic compound" same "oxide" same ("hole- transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:39
L81	98	L3	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:48
S215	98	electrolumines\$5 and vanadium adj oxide\$1 same transport\$1 with layer\$1	US-PGPUB; USPAT	OR	ON	2011/09/09 11:53
L4	96	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/12/31 04:39
S150	95	electroluminescent and "inorganic compound" same "oxide" same ("hole- transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:48
S151	86	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2011/09/09 11:48
S177	84	("charge generation" or "charge-generating") adj layer with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S140	82	electrolumines\$5 and vanadium adj oxide\$1 same transport\$1 with layer\$1	US-PGPUB; USPAT	OR	ON	2011/03/21 13:29
L5	77	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
S27	72	electroluminescent and carbazole same "hole- injecting"	US-PGPUB; USPAT	OR	ON	2009/06/25 12:03

S26	70	electroluminescent and "ruthenium oxide" same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	US-PGPUB; USPAT	OR	ON	2009/06/25 12:01
S152	69	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S73	66	fluorene with ("hole- transporting" or "hole transporting") and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/08 17:10
S18	51	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 11:19
S199	51	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S17	47	electroluminescent and "inorganic compound" same "oxide" same ("hole- transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 11:06
S57	47	("charge generation" or "charge-generating") adj layer with cathode and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 09:32
S109	46	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:28
L7	40	electroluminescent and "vanadium oxide" same "transport layer"	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
S19	40	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	US-PGPUB; USPAT	OR	ON	2009/06/25 11:19
L39	39	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1) and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:42
S154	39	electroluminescent and "vanadium oxide" same "transport layer"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48

S194	36	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1) and electroluminescent	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S5	35	nocera.in.	US-PGPUB; USPAT	OR	ON	2009/06/24 17:04
L23	32	N-substituted adj carbazole and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S124	26	"5059863"	US-PGPUB; USPAT	OR	OFF	2009/12/22 14:33
L16	23	electroluminescent and (("charge generation" or "charge-generating" or "charge-generation") adj layer) same "vanadium oxide"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
L27	23	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode with carbazole and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41
S172	23	N-substituted adj carbazole and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
L49	22	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and ("light- emitting" or "light emitting")	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:44
L54	20	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same "vanadium oxide"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:45
S22	20	electroluminescent and "vanadium oxide" same "transport layer"	US-PGPUB; USPAT	OR	ON	2009/06/25 11:25
S164	19	electroluminescent and (("charge generation" or "charge-generating" or "charge-generation") adj layer) same "vanadium oxide"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S189	19	richter.in. and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:51

S64	18	("5989737" "6486601" "20050084712" "20050098207" "7158161" "20050084713" "20050170208" "20050106419" "20060008740" "6602619" "20040185299" "20050067951" "20050221124" "20050225235" "6423429" "6013384" "6589673" "20030189401").pn.	US-PGPUB; USPAT	OR	ON	2009/07/08 14:47
S104	18	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1) and electroluminescent	US-PGPUB; USPAT	OR	OFF	2009/12/22 10:59
S84	17	richter.in. and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/09 11:33
S52	16	N-substituted adj carbazole and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/06/29 10:17
S176	16	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode with carbazole and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
L43	15	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
S200	15	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and ("light- emitting" or "light emitting")	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
L17	14	electroluminescent and "kido".in. and ("charge- generation" or "charge- generating" or "charge generation")	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:40
S59	14	("5989737" "6486601" "20050084712" "20050098207" "7158161" "20050084713" "20050170208" "20050106419" "20060008740" "6602619" "20040185299" "20050067951" "20050221124" "20050225235").pn.	US-PGPUB; USPAT	OR	ON	2009/07/08 13:36

S113	14	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and ("light- emitting" or "light emitting")	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:46
S179	14	("5989737" "6486601" "20050084712" "20050098207" "7158161" "20050084713" "20050170208" "20050106419" "20060008740" "6602619" "20040185299" "20050067951" "20050221124" "20050225235").pn.	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
S205	14	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same "vanadium oxide"	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
L40	12	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:42
L41	12	(@pd<"20031222" or @ap<"20031224") and (naphthalene same diimide \$1).ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
L47	12	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide). ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:43
L52	12	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide). ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:44
L55	12	(@pd<"20041128" or @ap<"20041130") and electroluminescent and "metal oxides" same arylamines	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:45
S56	12	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode with carbazole and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 09:23
S108	12	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge and electroluminescent	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:28

S198	12	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge and electroluminescent	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S93	11	kanamaru.in. and electroluminescent	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 15:10
L65	10	electroluminescent and rhenium with oxide\$1 same (transport\$1 with layer\$1)	US-PGPUB; USPAT	OR	ON	2011/12/31 04:46
L56	9	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:45
L57	9	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:45
S34	9	electroluminescent and "kido".in. and ("charge- generation" or "charge- generating" or "charge generation")	US-PGPUB; USPAT	OR	ON	2009/06/25 13:01
S165	9	electroluminescent and "kido".in. and ("charge- generation" or "charge- generating" or "charge generation")	US-PGPUB; USPAT	OR	ON	2011/09/09 11:49
S195	8	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1).ti.	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S196	8	(@pd<"20031222" or @ap<"20031224") and (naphthalene same diimide \$1).ti.	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S203	8	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide). ti.	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
S77	7	("20080254318" "20050031899" "20070031701" "20070049760" "20090058261" "20080284328" "20090160323").pn.	US-PGPUB; USPAT	OR	ON	2009/07/09 09:36
S120	6	("6103446" "6146809" "20010016269" "20010004107" "20030091862" "6114463"). pn.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:54
S121	6	("20030165715" "6436558")	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:56

L31	5	oxide same improve with ("hole-transporting" or "hole transporting") adj property and electroluminescent	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:41
S33	5	electroluminescent and (("charge generation" or "charge-generating" or "charge-generation") adj layer) same "vanadium oxide"	US-PGPUB; USPAT	OR	ON	2009/06/25 13:00
S105	5	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1).ti.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:18
S106	5	(@pd<"20031222" or @ap<"20031224") and (naphthalene same diimide \$1).ti.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:21
S119	5	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide). ti.	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:53
S182	5	oxide same improve with ("hole-transporting" or "hole transporting") adj property and electroluminescent	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
S207	5	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
S208	5	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:53
S216	5	electroluminescent and rhenium with oxide\$1 same (transport\$1 with layer\$1)	US-PGPUB; USPAT	OR	ON	2011/09/09 11:53
S58	4	("5989737" "6486601" 2005/0084712 2005/0098207 "7158161" 2005/0084713 2005/0170208 2005/0106419 2006/0008740 "6602619" 2004/0185299 2005/0067951 2005/0221124 2005/0225235).pn.	US-PGPUB; USPAT	OR	ON	2009/07/08 13:35
S63	4	oxide same improve with ("hole-transporting" or "hole transporting") adj property and electroluminescent	US-PGPUB; USPAT	OR	ON	2009/07/08 14:34
S133	4	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	US-PGPUB; USPAT	OR	OFF	2010/02/04 13:58

S141	4	electroluminescent and rhenium with oxide\$1 same (transport\$1 with layer\$1)	US-PGPUB; USPAT	OR	ON	2011/03/21 13:30
S178	4	("5989737" "6486601" 2005/0084712 2005/0098207 "7158161" 2005/0084713 2005/0170208 2005/0106419 2006/0008740 "6602619" 2004/0185299 2005/0067951 2005/0221124 2005/0225235).pn.	US-PGPUB; USPAT	OR	ON	2011/09/09 11:50
L37	3	(@pd<"20031222" or @ap<"20031224") and naphthalenediimide same link\$5	US-PGPUB; USPAT; DERWENT	OR	OFF	2011/12/31 04:42
S15	3	"10310574"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 10:00
S79	3	"10310574".pn.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 09:53
S114	3	("20050251930" "20060058330")	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:48
L12	2	electroluminescent and "small ionization" same "hole-injection"	US-PGPUB; USPAT	OR	ON	2011/12/31 04:39
L38	2	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1) same ("light-emitting" or "light emitting")	US-PGPUB; USPAT; DERWENT	OR	ON	2011/12/31 04:42
S20	2	"20050206305"	US-PGPUB; USPAT	OR	ON	2009/06/25 11:22
S39	2	2004JP-347518	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 16:55
S40	2	"20050225235".pn.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 17:11
S47	2	2004JP-347518	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 17:43
S48	2	"20050208334".pn.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 17:48
S111	2	"20050131220"	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:44
S112	2	"20030153005"	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:44

S129	2	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same "vanadium oxide"	US-PGPUB; USPAT	OR	OFF	2010/02/04 13:56
S134	2	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generation"	US-PGPUB; USPAT	OR	OFF	2010/02/04 13:58
S160	2	electroluminescent and "small ionization" same "hole-injection"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:48
S193	2	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1) same ("light-emitting" or "light emitting")	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S206	2	(@pd<"20041128" or @ap<"20041130") and electroluminescent and "metal oxides" same arylamines	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:52
L1	1	"10584308"	US-PGPUB; USPAT	OR	OFF	2011/12/31 04:38
L36	1	(@pd<"20031222" or @ap<"20031224") and naphthalenediimide same ("light emitting" or "light- emitting")	US-PGPUB; USPAT; DERWENT	OR	OFF	2011/12/31 04:42
S1	1	"20090058267"	US-PGPUB; USPAT	OR	ON	2009/06/24 16:24
S2	1	"6617051".pn.	US-PGPUB; USPAT	OR	ON	2009/06/24 17:00
S3	1	"20040170863".pn.	US-PGPUB; USPAT	OR	ON	2009/06/24 17:01
S4	1	"20040263069".pn.	US-PGPUB; USPAT	OR	ON	2009/06/24 17:02
S6	1	nocera.in. and cobalt	US-PGPUB; USPAT	OR	ON	2009/06/24 17:05
S8	1	1998JP-310574	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/24 17:06
S9	1	1998JP-310574	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/06/25 09:53
S28	1	electroluminescent and "small ionization" same "hole-injection"	US-PGPUB; USPAT	OR	ON	2009/06/25 12:06
S31	1	"20010022497".pn.	US-PGPUB; USPAT	OR	ON	2009/06/25 12:12
\$35	1	"20050225235".pn.	US-PGPUB; USPAT	OR	ON	2009/06/25 16:11

S36	1	"20090058267".pn.	US-PGPUB; USPAT	OR	ON	2009/06/25 16:15
S49	1	"20030129448".pn.	US-PGPUB; USPAT	OR	ON	2009/06/29 08:49
S50	1	"20050225235"	US-PGPUB; USPAT	OR	ON	2009/06/29 08:54
S60	1	"20050098207".pn.	US-PGPUB; USPAT	OR	ON	2009/07/08 13:56
S65	1	"20050225235"	US-PGPUB; USPAT	OR	ON	2009/07/08 15:12
S66	1	"20030129448"	US-PGPUB; USPAT	OR	ON	2009/07/08 15:54
S67	1	"20050225235"	US-PGPUB; USPAT	OR	ON	2009/07/08 15:58
S68	1	"6541129".pn.	US-PGPUB; USPAT	OR	ON	2009/07/08 16:49
S69	1	"6541129".pn.	US-PGPUB; USPAT	OR	ON	2009/07/08 16:53
S70	1	1998JP-234899	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/08 17:03
S78	1	"20050067951".pn.	US-PGPUB; USPAT	OR	ON	2009/07/09 09:48
S81	1	"20050098207".pn.	US-PGPUB; USPAT	OR	ON	2009/07/09 10:00
S82	1	"20050067251".pn.	US-PGPUB; USPAT	OR	ON	2009/07/09 11:32
S83	1	"20050067251".pn.	US-PGPUB; USPAT	OR	ON	2009/07/09 11:32
S85	1	"20080284328".pn.	US-PGPUB; USPAT	OR	ON	2009/07/09 14:40
S86	1	"200056491"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 15:02
S89	1	"200056491"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 15:02
S90	1	"200056491".pn.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 15:02
S92	1	"200056491"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 15:06
S97	1	1998JP-234899	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/07/09 15:17
S99	1	"20040185299"	US-PGPUB; USPAT	OR	ON	2009/07/13 15:55

S103	1	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide \$1) same ("light-emitting" or "light emitting")	US-PGPUB; USPAT	OR	OFF	2009/12/22 10:58
S110	1	"20070116981"	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:31
S116	1	"20050176970"	US-PGPUB; USPAT	OR	OFF	2009/12/22 11:52
S122	1	"20040219387"	US-PGPUB; USPAT	OR	OFF	2009/12/22 12:35
S123	1	"5059863".pn.	US-PGPUB; USPAT	OR	OFF	2009/12/22 12:39
S125	1	"10584308"	US-PGPUB; USPAT	OR	OFF	2010/02/04 11:28
S127	1	"10310574"	JPO	OR	OFF	2010/02/04 13:36
S132	1	(@pd<"20041128" or @ap<"20041130") and electroluminescent and "metal oxides" same arylamines	US-PGPUB; USPAT	OR	OFF	2010/02/04 13:57
S148	1	"10584308"	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:09
S191	1	(@pd<"20031222" or @ap<"20031224") and naphthalenediimide same link\$5	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S192	1	(@pd<"20031222" or @ap<"20031224") and naphthalenediimide same link\$5	US-PGPUB; USPAT	OR	OFF	2011/09/09 11:51
S222	1	"10584308"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:55
S223	1	"10584308"	US-PGPUB; USPAT	OR	ON	2011/09/09 11:55

## **EAST Search History (Interference)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L118	164783	(@pd<"20031222" or @ap<"20031224") and (naphthalene light semiconductor).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:51
L123	164783	(@pd<"20031222" or @ap<"20031224") and (naphthalene light semiconductor).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:52

L119	163902	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide light semiconductor).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:51
L124	163902	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide light semiconductor).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:52
L142	155214	electrolumines\$5 and carbazole\$1same (amin\$7 same derivative\$1)	USPAT; UPAD	OR	ON	2011/12/31 04:53
L107	54098	oxide same improve ("hole- transporting" or "hole transporting") and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L150	53180	oxide same improve ("hole-transporting" or "hole transporting") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:54
L108	51264	oxide same improve ("hole- transporting" or "hole transporting") adj proprety and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L102	2500	("hole injecting" or "hole transporting" or "hole- injecting" or "hole- transporting" or "hole injection" or "hole-injection") with cathode and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L103	2396	("hole injecting" or "hole transporting" or "hole- injecting" or "hole- transporting" or "hole injection" or "hole-injection") with layer with cathode and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L104	2027	("hole injecting" or "hole transporting" or "hole- injecting" or "hole- transporting" or "hole injection" or "hole-injection") adj layer with cathode and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L131	2016	electrolumines\$5 and oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:52

L149	1743	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") with cathode and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:54
L80	1622	electroluminescent and oxide same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:47
L98	1516	(carbazole with derivative\$5) same amin\$5	USPAT; UPAD	OR	ON	2011/12/31 04:49
L143	1154	electroluminescent and oxide same ("hole-transporting" or "hole transport") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:53
L115	896	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:51
L96	678	electroluminescent and carbazole same ("amine" or "amino")	USPAT; UPAD	OR	ON	2011/12/31 04:49
L140	568	electrolumines\$5 and carbazole\$1 same ("hole- injecting" "hole injecting" (hole with inject\$7))	USPAT; UPAD	OR	ON	2011/12/31 04:53
L147	538	electroluminescent and carbazole same ("amine" or "amino") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:54

L148	469	(carbazole with derivative\$5) same amin\$5 and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:54
L97	453	electroluminescent and carbazole same ("amine" or "amino") same derivative\$5	USPAT; UPAD	OR	ON	2011/12/31 04:49
L99	397	(carbazole with derivative) same amin\$3 and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:49
L141	259	vanadium with oxide\$1 same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electrolumines\$5	USPAT; UPAD	OR	ON	2011/12/31 04:53
L121	212	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same oxide	USPAT; UPAD	OR	ON	2011/12/31 04:51
L126	212	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same oxide	USPAT; UPAD	OR	ON	2011/12/31 04:52
L100	194	(carbazole with derivative) same amin\$3 and electroluminescent and @ay<="2004"	USPAT; UPAD	OR	ON	2011/12/31 04:49
L92	185	"vanadium oxide" same ("hole- injecting" or "hole injecting" or "hole injection" or "hole- injection") and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:49
L145	163	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:54
L135	141	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:53

L136	141	electrolumines\$5 and vanadium adj oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:53
L138	141	electrolumines\$5 and rhenium adj oxide\$1	USPAT; UPAD	OR	ON	2011/12/31 04:53
L144	132	electroluminescent and "ruthenium oxide" and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/ E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:53
L93	115	electroluminescent and carbazole same ("electron-injecting" or "electron-injecting" or "electron-injection" or "electron injection")	USPAT; UPAD	OR	ON	2011/12/31 04:49
L146	113	"vanadium oxide" same ("hole-injecting" or "hole injecting" or "hole injection" or "hole-injection") and electroluminescent and (428/690 428/917 428/411.1 428/336 313/502 313/503 313/504 313/505 313/506 313/507 313/508 313/509 257/40 257/88 257/104 257/ E51 532/1 532/1 540/1).ccls.	USPAT; UPAD	OR	ON	2011/12/31 04:54
L86	108	electroluminescent and "vanadium oxide" same ("hole- transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:48
L88	108	electroluminescent and "rhenium oxide"	USPAT; UPAD	OR	ON	2011/12/31 04:48
L112	83	anthracene with ("hole transporting" or "hole- transporting") and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L110	68	fluorene same ("hole- transporting" or "hole transporting") and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L132	66	electrolumines\$5 and inorganic adj compound\$1 same oxide\$1 same ("holetransporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:52

L139	62	electrolumines\$5 and ruthenium adj oxide\$1 same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	USPAT; UPAD	OR	ON	2011/12/31 04:53
L90	55	electroluminescent and carbazole same "hole- injecting"	USPAT; UPAD	OR	ON	2011/12/31 04:49
L89	52	electroluminescent and "ruthenium oxide" same ("hole-transport" or "hole transport" or "hole transporting" or "hole transporting")	USPAT; UPAD	OR	ON	2011/12/31 04:49
L117	46	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge	USPAT; UPAD	OR	ON	2011/12/31 04:51
L133	41	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:53
L134	41	electrolumines\$5 and transition same oxide\$1 same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:53
L83	38	electroluminescent and "inorganic compound" same "oxide" same ("hole- transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:48
L111	33	fluorene with ("hole- transporting" or "hole transporting") and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L84	27	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:48
L85	27	electroluminescent and transition same "oxide" same ("hole-transporting" or "hole transporting" or "hole transport")	USPAT; UPAD	OR	ON	2011/12/31 04:48
L106	22	("charge generation" or "charge-generating") adj layer with cathode and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50

L127	20	(@pd<"20041128" or @ap<"20041130") and electroluminescent and carbazole same "vanadium oxide"	USPAT; UPAD	OR	ON	2011/12/31 04:52
L101	14	N-substituted adj carbazole and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:49
L87	13	electroluminescent and "vanadium oxide" same "transport layer"	USPAT; UPAD	OR	ON	2011/12/31 04:48
L128	11	(@pd<"20041128" or @ap<"20041130") and electroluminescent and "metal oxides" same arylamines	USPAT; UPAD	OR	ON	2011/12/31 04:52
L122	10	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and ("light- emitting" or "light emitting")	USPAT; UPAD	OR	ON	2011/12/31 04:51
L94	8	electroluminescent and (("charge generation" or "charge-generating" or "charge-generation") adj layer) same "vanadium oxide"	USPAT; UPAD	OR	ON	2011/12/31 04:49
L114	8	(@pd<"20031222" or @ap<"20031224") and (naphthalene with diimide\$1). ti.	USPAT; UPAD	OR	ON	2011/12/31 04:51
L120	8	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:51
L125	8	(@pd<"20031222" or @ap<"20031224") and (naphthalene and diimide).ti.	USPAT; UPAD	OR	ON	2011/12/31 04:52
L105	7	("hole injecting" or "hole transporting" or "hole-injecting" or "hole-transporting" or "hole injection" or "hole-injection") adj layer with cathode with carbazole and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L116	7	(@pd<"20031222" or @ap<"20031224") and (naphthalene).ti. and charge and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:51
L129	5	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	USPAT; UPAD	OR	ON	2011/12/31 04:52
L130	5	(@pd<"20041128" or @ap<"20041130") and kido. in. and "charge generating"	USPAT; UPAD	OR	ON	2011/12/31 04:52

L109	3	oxide same improve with ("hole-transporting" or "hole transporting") adj property and electroluminescent	USPAT; UPAD	OR	ON	2011/12/31 04:50
L95	2	electroluminescent and "kido". in. and ("charge-generation" or "charge-generating" or "charge generation")	USPAT; UPAD	OR	ON	2011/12/31 04:49
L91	1	electroluminescent and "small ionization" same "hole- injection"	USPAT; UPAD	OR	ON	2011/12/31 04:49
L113	1	(@pd<"20031222" or @ap<"20031224") and naphthalenediimide same ("light emitting" or "light- emitting")	USPAT; UPAD	OR	OFF	2011/12/31 04:51
L137	1	electroluminescent and rhenium with oxide\$1 same (transport\$1 with layer\$1)	USPAT; UPAD	OR	ON	2011/12/31 04:53

## 12/31/2011 4:55:02 AM

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